IN THE CLAIMS:

1. (Original) A system for testing integrated circuits, comprising:

a source of chilled fluid;

a cold plate connected to the source of chilled fluid such that the temperature of the cold plate is reduced by the chilled fluid;

at least one heater connected to the cold plate such that the at least one heater supplies heat to the cold plate;

wherein the cold plate is placed in proximity to the integrated circuit to change the temperature of the integrated circuit.

2. (Original) The system of claim 1, wherein temperature control of the integrated circuit is accomplished on a coarse level by adjusting fluid temperature and/or fluid flow rate, and wherein temperature control of the integrated circuit is accomplished on a fine level by altering the output of the at least one heater.

3. (Original) The system of claim 1, wherein the at least one heater is responsive to an on chip temperature sensor of the integrated circuit through a feedback loop.

4. (Original) The system of claim 1, wherein a surface of the cold plate is pressed against a surface of the integrated circuit to form an interface, and wherein a gas is injected at the cold plate integrated circuit interface.

5. (Original) The system of claim 1, wherein a surface of the cold plate is pressed against a surface of the integrated circuit by a high pressure load; and

wherein the surface of the cold plate is smaller in area than the surface of the integrated circuit; and wherein the surface of the cold plate area is as large as possible while still being smaller than the surface of the integrated circuit.

6. (Original) The system of claim 1, wherein the cold plate is connected to the source of chilled fluid by pipes, the pipes being covered with insulation such that condensation does not form on the pipes.

7. (Original) A method of testing an integrated circuit, comprising the steps of:

supplying a chilled fluid to a cold plate, the cold plate being movable to be in contact with an integrated circuit;

supplying energy to at least one heater, the at least one heater being connected to heat the cold plate;

wherein the integrated circuit is maintained at a first temperature by varying energy supplied to the at least one heater.

8. (Original) The method of claim 7, wherein the at least one heater is a cartridge heater embedded in the cold plate.

9. (Original) The method of claim 7, wherein the at least one heater responds to a feedback loop based on the output of an on chip temperature sensor of the integrated circuit.

10. (Original) The method of claim 7, wherein temperature control of the integrated circuit is accomplished on a coarse level by adjusting the fluid temperature and/or fluid flow rate, and wherein temperature control of the integrated circuit is accomplished on a fine level by altering the output of the at least one heater.

11. (Original) The method of claim 7, wherein a surface of the cold plate is pressed against a surface of the integrated circuit to form an interface, and wherein a gas is injected at the cold plate integrated circuit interface.

12. (Original) The method of claim 12, wherein a surface of the cold plate is pressed against a surface of the integrated circuit by a high pressure load; and

wherein the surface of the cold plate is smaller in area than the surface of the integrated circuit; and wherein the surface of the cold plate area is as large as possible while still being smaller than the surface of the integrated circuit.

13. (Original) The method of claim 7, wherein the cold plate is supplied with chilled fluid by pipes, the pipes being covered with insulation such that condensation does not form on the pipes.

14-27. (Cancelled)